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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,447	10/21/2002	Thomas Grassl	GRAS3004/JEK	4692

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EXAMINER

HAWKINS, CHERYL N

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/926,447

Applicant(s)

GRASSL ET AL.

Examiner

Cheryl N Hawkins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-22 and 27-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-22 and 27-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/21/02 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/19/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 18-21, 27-31, 33-36, 38-43, and 45-48 are rejected under 35 U.S.C. 102(e) as being anticipated by Kohama et al. (US 6,412,701).

As to Claim 18, Kohama et al. discloses a method for incorporating a thinned chip (Figures 8 and 9, chip 1) into a smart card (Figures 8 and 9, flexible substrate 3) comprising applying the chip to a surface of the smart card externally (column 5, lines 1-6 and 34-51; column 8, lines 63-67; column 12, lines 4-17).

As to Claim 19, Kohama et al. discloses a method which includes applying the chip (Figures 8 and 9, chip 1) with its front side pointing outside to the surface of the

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smart card and wherein the card and chip are provided with conductive paths (Figures 8 and 9, coil 2).

As to Claim 20, Kohama et al. discloses a method which includes incorporating the chip into a cavity in the surface of the smart card (see Figure 9).

As to Claim 21, Kohama et al. discloses a method which includes pressing the chip into the surface of the smart card flush under the action of heat (column 5, lines 1-6 and 34-51).

As to Claim 27, Kohama et al. discloses a smart card (Figures 8 and 9, flexible substrate 3) having a thinned chip (Figures 8 and 9, chip 1) disposed on a surface of the smart card.

As to Claim 28, Kohama et al. discloses a smart card (Figures 8 and 9, flexible substrate 3) wherein the chip (Figures 8 and 9, chip 1) is disposed with its front side outside of the smart card and conductive paths (Figures 8 and 9, coil 2) are applied to the smart card and the chip on the outside.

As to Claim 29, Kohama et al. discloses a smart card wherein the conductive paths are printed (column 3, lines 40-43; column 21, lines 37-39).

As to Claim 30, Kohama et al. discloses a smart card wherein the chip is disposed in a cavity in the surface of the smart card (see Figure 9).

As to Claim 31, Kohama et al. discloses a smart card wherein the chip is pressed into the surface of the smart card flush (column 5, lines 1-6 and 34-51).

As to Claim 33, Kohama et al. discloses a method for incorporating a thinned chip (Figures 8 and 9, chip 1) into a smart card (Figures 8 and 9, flexible substrate 3) having a plastic card body which includes applying the chip to a surface of the card body

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externally, wherein the chip is permanently secured to the card body (column 5, lines 1-6 and 34-51; column 8, lines 63-67; column 12, lines 4-17).

As to Claim 34, Kohama et al. discloses a method which includes applying the chip (Figures 8 and 9, chip 1) having a front side facing outwardly from the surface of the card body (Figures 8 and 9, flexible substrate 3), wherein the card body and chip are provided with conductive paths (Figures 8 and 9, coil 2).

As to Claim 35, Kohama et al. discloses a method which includes incorporating the chip into a cavity in the surface of the card body (see Figure 9).

As to Claim 36, Kohama et al. discloses a method which includes pressing the chip into the surface of the card body flush under the action of heat wherein the material of the card body surrounds the entirety of the chip with the exception of a front side of the chip facing outwardly from the surface of the card body (column 5, lines 1-6 and 34-51).

As to Claim 38, Kohama et al. discloses a method wherein the card body consists a single card body (Figures 8 and 9, flexible substrate 3).

As to Claim 39, Kohama et al. discloses a smart card which includes a plastic card body (Figures 8 and 9, flexible substrate 3) having a thinned chip (Figures 8 and 9, chip 1) disposed on a surface of a card body, wherein the chip is permanently secured by the card body (column 5, lines 1-6 and 34-51; column 8, lines 63-67; column 12, lines 4-17).

As to Claim 40, Kohama et al. discloses a smart card wherein the chip (Figures 8 and 9, chip 1) is disposed with its front side outside on the card body (Figures 8 and 9, flexible substrate 3) and conductive paths (Figures 8 and 9, coil 2) are applied to the card body and the chip on the outside.

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As to Claim 41, Kohama et al. discloses a smart card wherein the conductive paths are printed (column 3, lines 40-43; column 21, lines 37-39).

As to Claim 42, Kohama et al. discloses a smart card wherein the chip is disposed in a cavity in the surface of the card body (see Figure 9).

As to Claim 43, Kohama et al. discloses a smart card wherein the chip is pressed into the surface of the card body flush (column 5, lines 1-6 and 34-51).

As to Claim 45, Kohama et al. discloses a smart card wherein the card body consists of a single card body (Figure 9, flexible substrate 3).

As to Claim 46, Kohama et al. discloses a method for incorporating a thinned chip into a smart card having a plastic body comprising the steps of providing a plurality of contacts on an external surface of the card body; placing the chip over portion of the plurality of contacts; applying the chip to the external surface of the card body; and permanently securing the chip to the card body (column 5, lines 1-6 and 34-51; column 8, lines 63-67; column 12, lines 4-17).

As to Claim 47, Kohama et al. discloses a method which includes incorporating portions of the contacts into the card body (see Figures 8 and 9, coil 2).

As to Claim 48, Kohama et al. discloses a method which includes incorporating the entirety of the contacts into the card body (see Figures 8 and 9, coil 2).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 18-22 and 27-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kohama et al. (US 6,412,701) in view of Bohm et al. (US 4,835,427).

As to Claim 18, Kohama et al. discloses a method for incorporating a thinned chip (Figures 8 and 9, chip 1) into a smart card (Figures 8 and 9, flexible substrate 3) comprising applying the chip to a surface of the smart card externally (column 5, lines 1-6 and 34-51; column 8, lines 63-67; column 12, lines 4-17).

As to Claim 19, Kohama et al. discloses a method which includes applying the chip (Figures 8 and 9, chip 1) with its front side pointing outside to the surface of the smart card and wherein the card and chip are provided with conductive paths (Figures 8 and 9, coil 2).

As to Claim 20, Kohama et al. discloses a method which includes incorporating the chip into a cavity in the surface of the smart card (see Figure 9).

As to Claim 21, Kohama et al. discloses a method which includes pressing the chip into the surface of the smart card flush under the action of heat (column 5, lines 1-6 and 34-51).

As to Claims 22 and 37, Kohama et al. does not disclose a method which includes coating the chip located on the surface of the smart card with a protective lacquer. It is well known and conventional in the electronic arts, as disclosed by Bohm et al. (column

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2, lines 18-23), to provide chips with a lacquer coating to protect the chip and its connections against mechanical damage or aggressive environmental influences. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Kohama et al. to include coating the chip with a lacquer as suggested by Bohm et al. to protect the chip and its connections against mechanical damage or aggressive environmental influences.

As to Claim 27, Kohama et al. discloses a smart card (Figures 8 and 9, flexible substrate 3) having a thinned chip (Figures 8 and 9, chip 1) disposed on a surface of the smart card.

As to Claim 28, Kohama et al. discloses a smart card (Figures 8 and 9, flexible substrate 3) wherein the chip (Figures 8 and 9, chip 1) is disposed with its front side outside of the smart card and conductive paths (Figures 8 and 9, coil 2) are applied to the smart card and the chip on the outside.

As to Claim 29, Kohama et al. discloses a smart card wherein the conductive paths are printed (column 3, lines 40-43; column 21, lines 37-39).

As to Claim 30, Kohama et al. discloses a smart card wherein the chip is disposed in a cavity in the surface of the smart card (see Figure 9).

As to Claim 31, Kohama et al. discloses a smart card wherein the chip is pressed into the surface of the smart card flush (column 5, lines 1-6 and 34-51).

As to Claims 32 and 44, Kohama et al. does not disclose a smart card wherein the chip is coated with a protective lacquer. It is well known and conventional in the electronic arts, as disclosed by Bohm et al. (column 2, lines 18-23), to provide chips with a lacquer coating to protect the chip and its connections against mechanical damage or

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aggressive environmental influences. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the smart card of Kohama et al. to include a chip coated with a lacquer as suggested by Bohm et al. to protect the chip and its connections against mechanical damage or aggressive environmental influences.

As to Claim 33, Kohama et al. discloses a method for incorporating a thinned chip (Figures 8 and 9, chip 1) into a smart card (Figures 8 and 9, flexible substrate 3) having a plastic card body which includes applying the chip to a surface of the card body externally, wherein the chip is permanently secured to the card body (column 5, lines 1-6 and 34-51; column 8, lines 63-67; column 12, lines 4-17).

As to Claim 34, Kohama et al. discloses a method which includes applying the chip (Figures 8 and 9, chip 1) having a front side facing outwardly from the surface of the card body (Figures 8 and 9, flexible substrate 3), wherein the card body and chip are provided with conductive paths (Figures 8 and 9, coil 2).

As to Claim 35, Kohama et al. discloses a method which includes incorporating the chip into a cavity in the surface of the card body (see Figure 9).

As to Claim 36, Kohama et al. discloses a method which includes pressing the chip into the surface of the card body flush under the action of heat wherein the material of the card body surrounds the entirety of the chip with the exception of a front side of the chip facing outwardly from the surface of the card body (column 5, lines 1-6 and 34-51).

As to Claim 38, Kohama et al. discloses a method wherein the card body consists a single card body (Figures 8 and 9, flexible substrate 3).

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As to Claim 39, Kohama et al. discloses a smart card which includes a plastic card body (Figures 8 and 9, flexible substrate 3) having a thinned chip (Figures 8 and 9, chip 1) disposed on a surface of a card body, wherein the chip is permanently secured by the card body (column 5, lines 1-6 and 34-51; column 8, lines 63-67; column 12, lines 4-17).

As to Claim 40, Kohama et al. discloses a smart card wherein the chip (Figures 8 and 9, chip 1) is disposed with its front side outside on the card body (Figures 8 and 9, flexible substrate 3) and conductive paths (Figures 8 and 9, coil 2) are applied to the card body and the chip on the outside.

As to Claim 41, Kohama et al. discloses a smart card wherein the conductive paths are printed (column 3, lines 40-43; column 21, lines 37-39).

As to Claim 42, Kohama et al. discloses a smart card wherein the chip is disposed in a cavity in the surface of the card body (see Figure 9).

As to Claim 43, Kohama et al. discloses a smart card wherein the chip is pressed into the surface of the card body flush (column 5, lines 1-6 and 34-51).

As to Claim 45, Kohama et al. discloses a smart card wherein the card body consists of a single card body (Figure 9, flexible substrate 3).

As to Claim 46, Kohama et al. discloses a method for incorporating a thinned chip into a smart card having a plastic body comprising the steps of providing a plurality of contacts on an external surface of the card body; placing the chip over portion of the plurality of contacts; applying the chip to the external surface of the card body; and permanently securing the chip to the card body (column 5, lines 1-6 and 34-51; column 8, lines 63-67; column 12, lines 4-17).

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As to Claim 47, Kohama et al. discloses a method which includes incorporating portions of the contacts into the card body (see Figures 8 and 9, coil 2).

As to Claim 48, Kohama et al. discloses a method which includes incorporating the entirety of the contacts into the card body (see Figures 8 and 9, coil 2).

5. Claims 18, 20, 27, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fehrman et al. (US 6,193,163) in view of Kohama et al. (US 6,412,701).

As to Claim 18, Fehrman et al. discloses a method for incorporating a chip (Figure 1, semiconductor chip assembly 14) into a smart card (Figure 1, smart card body 12) comprising applying the chip to a surface of the smart card externally. Fehrman et al. does not disclose the chip as being thinned. Kohama et al. discloses a method of incorporating a thinned chip into a smart card so that the smart card can be made thinner (column 8, lines 63-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method disclosed by Fehrman et al. to include a thinned chip as suggested by Kohama et al. to produce a thinner smart card with decreased material costs.

As to Claim 20, the references as combined (see Fehrman et al.) disclose a method which includes incorporating the chip into a cavity in the surface of the smart card (see Figure 1).

As to Claim 27, Fehrman et al. discloses a smart card (Figure 1, smart card body 12) comprising a chip (Figure 1, semiconductor chip assembly 14) disposed on a surface of the smart card. Fehrman et al. does not disclose the chip as being thinned. Kohama et

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al. discloses a smart card which includes a thinned chip deposited on a surface of the smart card so that the smart card can be made thinner (column 8, lines 63-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the chip disclosed by Fehrman et al. to be thinned as suggested by Kohama et al. to produce a thinner smart card with decreased material costs.

As to Claim 30, the references as combined (see Fehrman et al.) disclose a smart card in which the chip is disposed in a cavity in the surface of the smart card (see Figure 1).

6. Claims 22 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fehrman et al. (US 6,193,163) and Kohama et al. (US 6,412,701) as applied to claims 18 and 27 above, and further in view of Bohm et al. (US 4,835,427).

As to Claim 22, the references as combined do not disclose a method which includes coating the chip located on the surface of the smart card with a protective lacquer. It is well known and conventional in the electronic arts, as disclosed by Bohm et al. (column 2, lines 18-23), to provide chips with a lacquer coating to protect the chip and its connections against mechanical damage or aggressive environmental influences. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of the references as combined to include coating the chip with a lacquer as suggested by Bohm et al. to protect the chip and its connections against mechanical damage or aggressive environmental influences.

As to Claim 32, the references as combined do not disclose a smart card wherein the chip is coated with a protective lacquer. It is well known and conventional in the

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electronic arts, as disclosed by Bohm et al. (column 2, lines 18-23), to provide chips with a lacquer coating to protect the chip and its connections against mechanical damage or aggressive environmental influences. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the smart card of the references as combined to include a chip coated with a lacquer as suggested by Bohm et al. to protect the chip and its connections against mechanical damage or aggressive environmental influences.

7. Claims 18, 20, 21, 27, 30, 31, 33, 35, 36, 38, 39, 42, 43, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Provost (FR 2 780 534) in view of Kohama et al. (US 6,412,701).

As to Claim 18, Provost discloses a method for incorporating a chip into a smart card, comprising applying the chip to a surface of the smart card externally (abstract). Provost does not disclose the chip as being thinned. Kohama et al. discloses a method of incorporating a thinned chip into a smart card so that the smart card can be made thinner (column 8, lines 63-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method disclosed by Provost to include thinning the chip as suggested by Kohama et al. to produce a thinner smart card with decreased material costs.

As to Claim 20, the references as combined (see Fehrman et al.) disclose a method which includes incorporating the chip into a cavity in the surface of the smart card (see Figure 2).

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As to Claim 21, the references as combined (see Provost) disclose a method which includes pressing the chip into the surface of the smart card flush under the action of heat (abstract).

As to Claim 27, Provost discloses a smart card comprising a smart card having a chip disposed on a surface of the smart card (abstract). Kohama et al. discloses a smart card which includes a thinned chip disposed on a surface of the smart card so that the smart card can be made thinner (column 8, lines 63-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the chip disclosed by Provost to be thinned as suggested by Kohama et al. to produce a thinner smart card with decreased material costs.

As to Claim 30, the references as combined (see Provost) disclose a smart card wherein the chip is disposed in a cavity in the surface of the smart card (see Figure 2).

As to Claim 31, the references as combined (see Provost) disclose a smart card in which the chip is pressed into the surface of the smart card body flush (abstract).

As to Claim 33, Provost discloses a method for incorporating a chip into a smart card having a plastic card body which includes applying the chip to a surface of the smart card externally, wherein the chip is permanently secured by the card body (abstract). Provost does not disclose the chip as being thinned. Kohama et al. discloses a method of incorporating a thinned chip into a smart card so that the smart card can be made thinner (column 8, lines 63-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method disclosed by Provost to include thinning the chip as suggested by Kohama et al. to produce a thinner smart card with decreased material costs.

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As to Claim 35, the references as combined (see Provost) disclose a method which includes incorporating the chip into a cavity in the surface of the card body (abstract; Figure 2).

As to Claim 36, the references as combined (see Provost) disclose a method which includes pressing the chip into the surface of the card body flush under the action of heat wherein the material of the card body surrounds the entirety of the chip with the exception of a front side of the chip facing outwardly from the surface of the card body (abstract; Figure 2).

As to Claim 38, the references as combined (see Provost) disclose a method wherein the card body consists of a single card body (Figure 2, card base 12).

As to Claim 39, Provost discloses a smart card comprising a card body having a chip disposed on a surface of the card body, wherein the chip is permanently secured by the card body (abstract). Provost does not disclose the chip as being thinned. Kohama et al. discloses a smart card which includes a thinned chip so that the smart card can be made thinner (column 8, lines 63-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the chip disclosed by Provost to be thinned as suggested by Kohama et al. to produce a thinner smart card with decreased material costs.

As to Claim 42, the references as combined (see Provost) disclose a smart card wherein the chip is disposed in a cavity in the surface of the card body (see Figure 2).

As to Claim 43, the references as combined (see Provost) disclose a smart card wherein the chip is pressed into the surface of the card body flush (abstract; Figure 2).

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As to Claim 45, the references as combined (see Provost) disclose a smart card wherein the card body consists of a single card body (Figure 2, base 12).

8. Claims 22, 32, 37, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Provost (FR 2 780 534) and Kohama et al. (US 6,412,701) as applied to claims 18, 27, 33, and 39 above, and further in view of Bohm et al. (US 4,835,427).

As to Claims 22 and 37, the references as combined do not disclose a method which includes coating the chip located on the surface of the smart card with a protective lacquer. It is well known and conventional in the electronic arts, as disclosed by Bohm et al. (column 2, lines 18-23), to provide chips with a lacquer coating to protect the chip and its connections against mechanical damage or aggressive environmental influences. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of the references as combined to include coating the chip with a lacquer as suggested by Bohm et al. to protect the chip and its connections against mechanical damage or aggressive environmental influences.

As to Claims 32 and 44, the references as combined do not disclose a smart card wherein the chip is coated with a protective lacquer. It is well known and conventional in the electronic arts, as disclosed by Bohm et al. (column 2, lines 18-23), to provide chips with a lacquer coating to protect the chip and its connections against mechanical damage or aggressive environmental influences. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the smart card of the references as combined to include a chip coated with a lacquer as suggested by Bohm et al. to protect

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the chip and its connections against mechanical damage or aggressive environmental influences.

Response to Arguments

9. In response to the amendments to the specification, the objections to the specification have been withdrawn.

The applicant's arguments that there is no suggestion as to the method of forming the IC modules in Figures 8 and 9 of the Kohama et al. reference and that it is merely presumed that the IC module illustrated in Figures 8 and 9 is formed in the manner described in Claim 18, the examiner disagrees and maintains that the reference of Kohama et al. discloses a method for incorporating a thinned chip into a smart card which includes applying the chip to a surface of the smart card externally (column 8, lines 63-67; column 12, lines 4-8).

The applicant's arguments regarding the disclosure of the reference of Kohama et al., Fehrman et al., or Provost as modified with the teachings of Miyamoto et al. have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a smart card with an enhanced ability to bend and be subjected to torsion) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In any event, it is noted

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that the reference of Kohama et al. is specifically directed to a flexible smart card which incorporates the use of a thinned chip and methods for its manufacture.

In response to the applicant's arguments that the Provost reference does not disclose a method in which the chip is applied externally to the surface of the smart card, the examiner disagrees and maintains that the reference of Provost discloses a method for incorporating a chip (Figure 3, semiconductor chip 20) into a smart card (Figure 3, base 12) which includes applying the chip to a surface of the smart card externally (see abstract). Provost discloses that the chip is inserted into the smart card by hot pressing so that the top of the chip is flush with the surface of the card (see abstract), therefore the examiner asserts that this disclosure meets the limitations of the claims. It is noted that the claims do not exclude a method in which an additional layer is provided over the chip after it has been applied to the surface of the card.

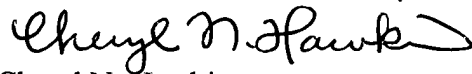
Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl N Hawkins whose telephone number is (571) 272-1229. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher A Fiorilla can be reached on (517) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cheryl N. Hawkins

March 28, 2005



CHRIS FIORILLA
SUPERVISORY PATENT EXAMINER

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